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\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	OCT 23	The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded
NEWS	4	OCT 30	CHEMLIST enhanced with new search and display field
NEWS	5	NOV 03	JAPIO enhanced with IPC 8 features and functionality
NEWS	6	NOV 10	CA/CAPLUS F-Term thesaurus enhanced
NEWS	7	NOV 10	STN Express with Discover! free maintenance release Version 8.01c now available
NEWS	8	NOV 20	CA/CAPLUS to MARPAT accession number crossover limit increased to 50,000
NEWS	9	DEC 01	CAS REGISTRY updated with new ambiguity codes
NEWS	10	DEC 11	CAS REGISTRY chemical nomenclature enhanced
NEWS	11	DEC 14	WPIDS/WPINDEX/WPIX manual codes updated
NEWS	12	DEC 14	GBFULL and FRFULL enhanced with IPC 8 features and functionality
NEWS	13	DEC 18	CA/CAPLUS pre-1967 chemical substance index entries enhanced with preparation role
NEWS	14	DEC 18	CA/CAPLUS patent kind codes updated
NEWS	15	DEC 18	MARPAT to CA/CAPLUS accession number crossover limit increased to 50,000
NEWS	16	DEC 18	MEDLINE updated in preparation for 2007 reload
NEWS	17	DEC 27	CA/CAPLUS enhanced with more pre-1907 records
NEWS	18	JAN 08	CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS	19	JAN 16	CA/CAPLUS Company Name Thesaurus enhanced and reloaded
NEWS	20	JAN 16	IPC version 2007.01 thesaurus available on STN
NEWS	21	JAN 16	WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS	22	JAN 22	CA/CAPLUS updated with revised CAS roles
NEWS	23	JAN 22	CA/CAPLUS enhanced with patent applications from India
NEWS	24	JAN 29	PHAR reloaded with new search and display fields
NEWS	25	JAN 29	CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS	26	FEB 13	CASREACT coverage to be extended
NEWS	27	Feb 15	PATDPASPC enhanced with Drug Approval numbers
NEWS	28	Feb 15	RUSSIAPAT enhanced with pre-1994 records
NEWS	29	Feb 23	KOREAPAT enhanced with IPC 8 features and functionality
NEWS EXPRESS			NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS LOGIN			Welcome Banner and News Items
NEWS IPC8			For general information regarding STN implementation of IPC 8
NEWS X25			X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 16:11:53 ON 23 FEB 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 16:12:08 ON 23 FEB 2007

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STRUCTURE FILE UPDATES: 22 FEB 2007 HIGHEST RN 922800-14-4

DICTIONARY FILE UPDATES: 22 FEB 2007 HIGHEST RN 922800-14-4

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TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

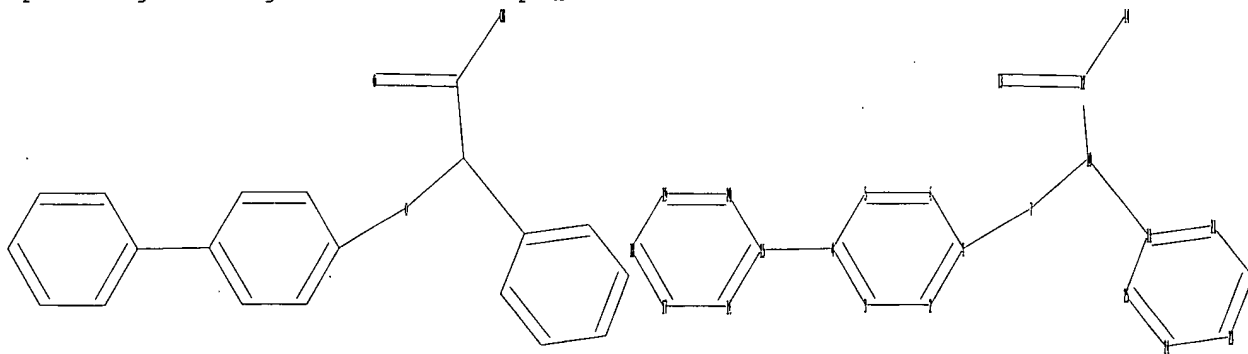
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10823842c.str



chain nodes :

7 10 12 13 14

ring nodes :

1 2 3 4 5 6 11 15 16 17 18 19 20 21 22 23 24 25

chain bonds :

1-7 4-15 7-10 10-11 10-12 12-13 12-14

ring bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 11-21 11-25 15-16 15-20 16-17 17-18 18-19  
 19-20 21-22 22-23 23-24 24-25  
 exact/norm bonds :  
 1-7 7-10  
 exact bonds :  
 4-15 10-11 10-12  
 normalized bonds :  
 1-2 1-6 2-3 3-4 4-5 5-6 11-21 11-25 12-13 12-14 15-16 15-20 16-17  
 17-18 18-19 19-20 21-22 22-23 23-24 24-25  
 isolated ring systems :  
 containing 1 : 15 :

G1:C,O,S,N

Match level :

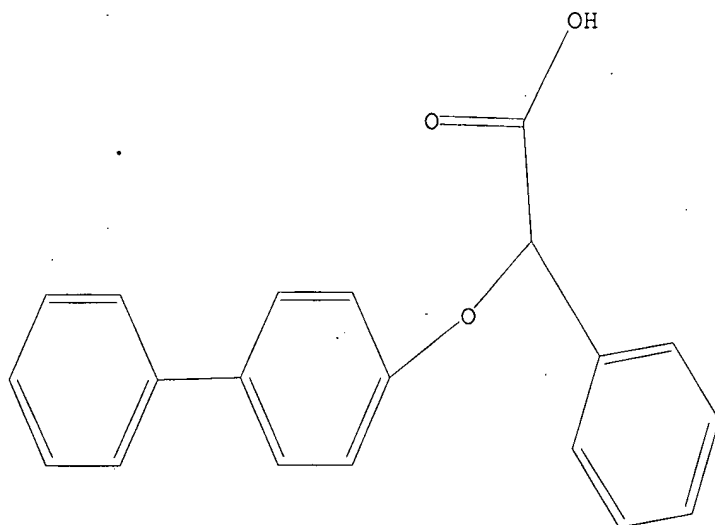
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 10:CLASS 11:CLASS  
 12:CLASS 13:CLASS 14:CLASS 15:Atom 16:CLASS 17:CLASS 18:Atom 19:Atom  
 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 C,O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 16:12:51 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS 2 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 5 TO 234

PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 16:12:55 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 195 TO ITERATE

100.0% PROCESSED 195 ITERATIONS

44 ANSWERS

SEARCH TIME: 00.00.01

L3 44 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

172.31

FILE 'CAPLUS' ENTERED AT 16:13:00 ON 23 FEB 2007

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FILE COVERS 1907 - 23 Feb 2007 VOL 146 ISS 10

FILE LAST UPDATED: 22 Feb 2007 (20070222/ED)

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<http://www.cas.org/infopolicy.html>

=> s 13 full

L4 17 L3

=> s 14 and py<2003

22869415 PY<2003

L5 8 L4 AND PY<2003

=> d ibib abs hitstr tot

L5 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:671733 CAPLUS

DOCUMENT NUMBER: 137:201154

TITLE: Preparation of phenyl derivatives as inhibitors of factor Xa and factor VIIa

INVENTOR(S): Cezanne, Bertram; Juraszyk, Horst; Dorsch, Dieter; Tsaklakidis, Chistos; Gleitz, Johannes; Barnes, Christopher

PATENT ASSIGNEE(S): Merck Patent GmbH, Germany

SOURCE: Ger. Offen., 20 pp.

CODEN: GWXXBX

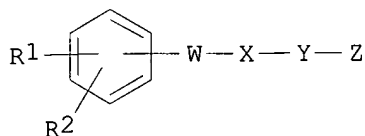
DOCUMENT TYPE: Patent

LANGUAGE: German

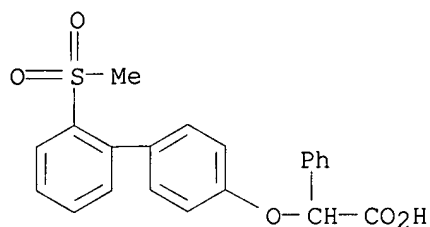
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10110325	A1	20020905	DE 2001-10110325	20010303 <--
CA 2439644	A1	20020912	CA 2002-2439644	20020204 <--
WO 2002070471	A1	20020912	WO 2002-EP1114	20020204 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1370522	A1	20031217	EP 2002-719754	20020204
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
HU 200303437	A2	20040128	HU 2003-3437	20020204
JP 2004525119	T	20040819	JP 2002-569792	20020204
CN 1524072	A	20040825	CN 2002-805731	20020204
US 2004092517	A1	20040513	US 2003-469687	20030903
ZA 2003007715	A	20050103	ZA 2003-7715	20031002
PRIORITY APPLN. INFO.:			DE 2001-10110325	A 20010303
			WO 2002-EP1114	W 20020204
OTHER SOURCE(S):		MARPAT 137:201154		
GI				

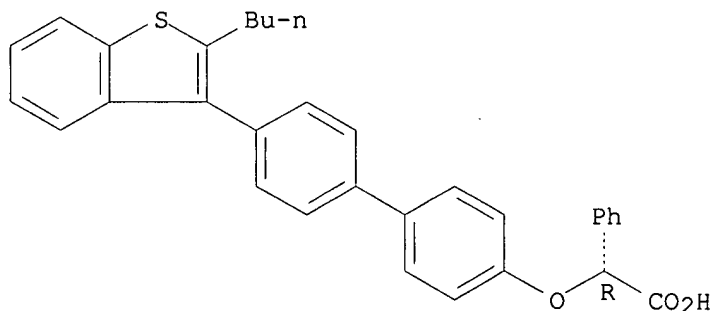


- AB Title compds. [I; R1 = cyano, COR3, CO2R3, OR3, (amino protecting group-substituted) C(:NH)NH2, CON(R3)2, etc.; R2 = H, halo, A, OR3, N(R3)2, NO2, cyano, CO2R3, CON(R3)2, etc.; R3 = H, A, etc.; A = (branched) (O-, S-interrupted) (fluorinated) alkyl, alkenyl; W = NR3CO, NR3COC(R4)2, NR3C(R4)2, C(R4)2NR3C(R4)2; R4 = H, A; X = C(R3)2, [C(R3)2]2, C(R3)2O, C(R3)2NR3; Y = alkylene, cycloalkylene, (substituted) heterocycldiyl, etc; Z = OR3, N(R3)2, N(R3)2CON(R3)2, etc.], were prepared Thus, a mixture of (rac)-2-(2'-methanesulfonylbiphenyl-4-oxy)-2-phenylacetic acid (preparation given), 3-(methyl-1,2,4-oxadiazol-3-yl)aniline, and TBTU in DMF was stirred with 4-methylmorpholine for 20 h at room temperature to give (rac)-N-[3-(5-methyl-1,2,4-oxadiazol-3-yl)phenyl]-2-(2'-methanesulfonylbiphenyl-4-oxy)-2-phenylacetamide which was hydrogenated in the presence of Raney Ni for 18 h at room temperature to give (rac)-N-(3-amidinophenyl)-2-(2'-methanesulfonylbiphenyl-4-oxy)-2-phenylacetamide. The latter inhibited factor Xa with IC50 = 1.1·10<sup>-7</sup> M and factor VIIa with IC50 = 4.6·10<sup>-8</sup> M.
- IT 452314-28-2P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of amidinophenyls as inhibitors of factor Xa and factor VIIa)
- RN 452314-28-2 CAPLUS
- CN Benzeneacetic acid, α-[[2'-(methysulfonyl)[1,1'-biphenyl]-4-yl]oxy]-  
(9CI) (CA INDEX NAME)



L5 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:324943 CAPLUS  
 DOCUMENT NUMBER: 137:319942  
 TITLE: 3D-QSAR CoMFA and CoMSIA on protein tyrosine phosphatase 1B inhibitors  
 AUTHOR(S): Murthy, V. Sreenivasa; Kulkarni, Vithal M.  
 CORPORATE SOURCE: Pharmaceutical Technology and Pharmacy Division, Institute of Chemical Technology, University of Mumbai, Matunga, Mumbai, 400 019, India  
 SOURCE: Bioorganic & Medicinal Chemistry (2002), 10(7), 2267-2282  
 CODEN: BMECEP; ISSN: 0968-0896  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB 3D-QSAR and mol. modeling was performed on a series of benzofuran/benzothiophene biphenyls as protein tyrosine phosphatase 1B (PTP 1B) inhibitors with anti-hyperglycemic activity. Evaluation of 92 compds. served to establish the model, which was validated by evaluation of an external set of 26 compds. The lowest energy conformer of most active compound obtained from simulated annealing was used as a template structure for the alignment. The best predictions were obtained with the CoMFA model from RMS fit and A log P as addnl. descriptor ( $r^2_{cv}=0.615$ ,  $r^2=0.842$ ), and with the CoMSIA combined steric, electrostatic, and lipophilic fields ( $r^2_{cv}=0.597$ ,  $r^2=0.910$ ). The 3D-QSAR model was then superimposed to the PTP 1B active site, giving direct contour maps of the different fields. Further comparison of the contour maps from the 3D-QSAR showed high level of compatibility with the active site of PTP 1B enzyme.  
 IT 263759-84-8  
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (3D-QSAR CoMFA and CoMSIA on protein tyrosine phosphatase 1B inhibitors)  
 RN 263759-84-8 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -[[4'-(2-butylbenzo[b]thien-3-yl)[1,1'-biphenyl]-4-yl]oxy]-, ( $\alpha$ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS

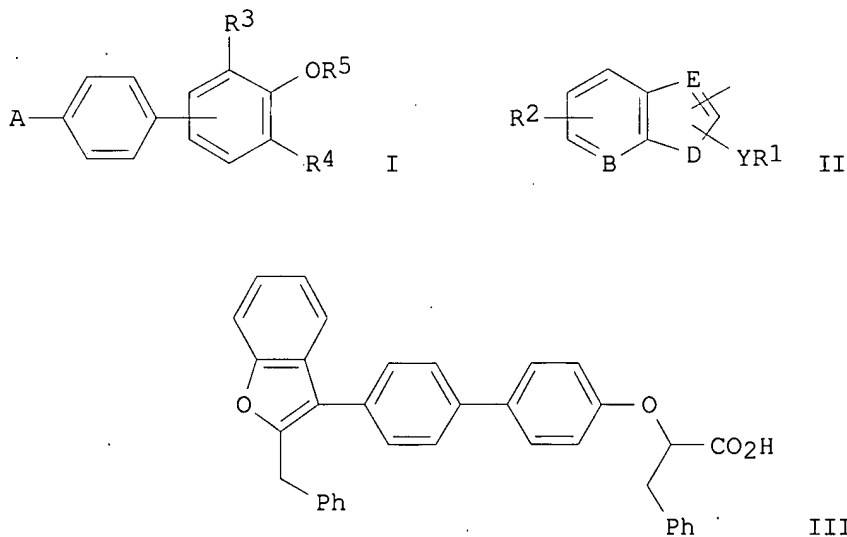
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2001:355085 CAPLUS  
 DOCUMENT NUMBER: 134:353250  
 TITLE: Preparation of  $\alpha$ -(biphenylyloxo)alkanoic acids  
 for treatment of insulin resistance and hyperglycemia  
 INVENTOR(S): Malamas, Michael S.; Mcdevitt, Robert E.; Adebayo,  
 Folake O.  
 PATENT ASSIGNEE(S): American Home Products Corporation, USA  
 SOURCE: U.S., 30 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6232322	B1	20010515	US 1999-307972	19990510 <--
US 2001041715	A1	20011115	US 2001-798109	20010302 <--
US 6391897	B2	20020521		
US 2001053785	A1	20011220	US 2001-798088	20010302 <--
US 6369072	B2	20020409		

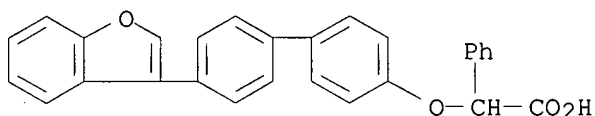
PRIORITY APPLN. INFO.:  
 US 1998-113654P P 19980512  
 US 1998-76205 A 19980512  
 US 1999-307972 A3 19990510

OTHER SOURCE(S): MARPAT 134:353250  
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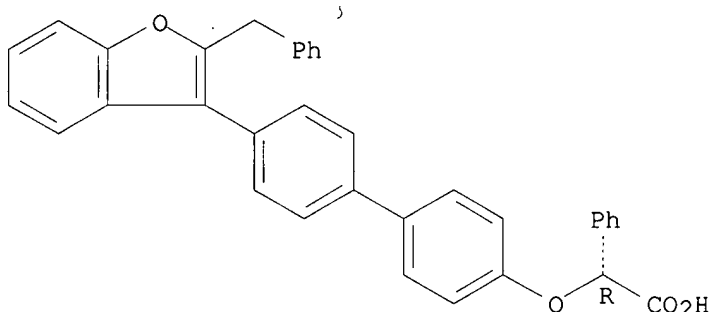
AB The title compds. [I; A = II (wherein B = C; D = O, S, N; E = C; Y = a bond, CH<sub>2</sub>; CO, CHOH; R<sub>1</sub> = alkyl, aryl, arylakyl, etc.; R<sub>2</sub> = H, alkyl, alkoxy, etc.); R<sub>3</sub>, R<sub>4</sub> = H, halo, alkyl, etc.; R<sub>5</sub> = H, alkyl, etc.] were prepared as protein-tyrosine phosphatase inhibitors. Thus, 4-BrC<sub>6</sub>H<sub>4</sub>COCH<sub>2</sub>Br was etherified by PhOH and the cyclized product condensed with 4-(MeO)C<sub>6</sub>H<sub>4</sub>B(OH)<sub>2</sub> to give, after O-demethylation, 3-(4'-hydroxybiphenyl)benzofuran which was acylated by BzNMeOMe and the reduced product etherified by (R)-PhCH<sub>2</sub>CH(OH)CO<sub>2</sub>Me to give, after saponification, title compd (S)-III. Data for biol. activity of I were given.

IT 250341-86-7P 250341-99-2P 250342-02-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of  $\alpha$ -(biphenyloxy)alkanoic acids for treatment of insulin resistance and hyperglycemia)  
 RN 250341-86-7 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -[[4'-(3-benzofuranyl)[1,1'-biphenyl]-4-yl]oxy]-(9CI) (CA INDEX NAME)

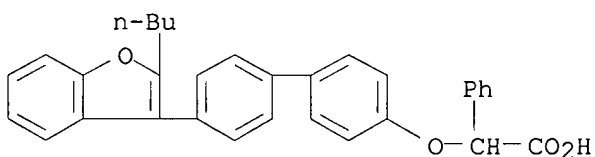


RN 250341-99-2 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -[[4'-[2-(phenylmethyl)-3-benzofuranyl][1,1'-biphenyl]-4-yl]oxy]-, ( $\alpha$ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 250342-02-0 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -[[4'-(2-butyl-3-benzofuranyl)[1,1'-biphenyl]-4-yl]oxy]- (9CI) (CA INDEX NAME)



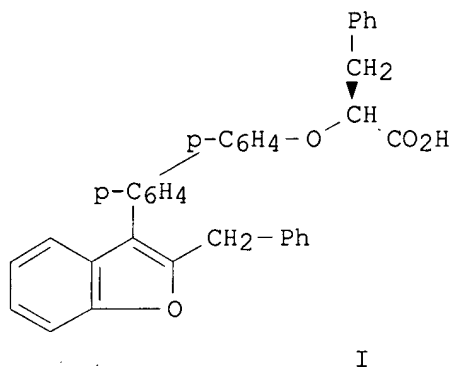
REFERENCE COUNT: 98 THERE ARE 98 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2000:128048 CAPLUS  
 DOCUMENT NUMBER: 132:273845  
 TITLE: Novel Benzofuran and Benzothiophene Biphenyls as Inhibitors of Protein Tyrosine Phosphatase 1B with Antihyperglycemic Properties  
 AUTHOR(S): Malamas, Michael S.; Sredy, Janet; Moxham, Christopher; Katz, Alan; Xu, Weixin; McDevitt, Robert; Adebayo, Folake O.; Sawicki, Diane R.; Seestaller, Laura; Sullivan, Donald; Taylor, Joseph R.  
 CORPORATE SOURCE: Wyeth-Ayerst Research Inc., Princeton, NJ, 08543-8000, USA  
 SOURCE: Journal of Medicinal Chemistry (2000),



43(7), 1293-1310  
 CODEN: JMCMAR; ISSN: 0022-2623  
 American Chemical Society  
 Journal  
 English

PUBLISHER:  
 DOCUMENT TYPE:  
 LANGUAGE:  
 GI



AB Insulin resistance in the liver and peripheral tissues, together with a pancreatic cell defect, are the common causes of Type 2 diabetes. It is now appreciated that insulin resistance can result from a defect in the insulin receptor signaling system, at a site post binding of insulin to its receptor. Protein tyrosine phosphatases (PTPases) have been shown to be neg. regulators of the insulin receptor. Inhibition of PTPases may be an effective method in the treatment of Type 2 diabetes. We have identified two novel series of benzofuran/benzothiophene biphenyl oxo-acetic acids and sulfonyl-salicylic acids as potent inhibitors of PTP1B with good oral antihyperglycemic activity. To assist in the design of these inhibitors, crystallog. studies have attempted to identify enzyme inhibitor interactions. Resolution of crystal complexes has suggested that the inhibitors bind to the enzyme active site and are held in place through hydrogen bonding and van der Waals interactions formed within two hydrophobic pockets. In the oxo-acetic acid series, hydrophobic substituents at position-2 of the benzofuran/benzothiophene biphenyl framework interacted with Phe182 of the catalytic site and were very critical to the intrinsic activity of the mol. The hydrophobic region of the catalytic-site pocket was exploited and taken advantage by hydrophobic substituents at either the  $\alpha$ -carbon or the ortho aromatic positions of the oxo-acetic acid moiety. Similar ortho aromatic substitutions on the salicylic acid-type inhibitors had no effect, primarily due to the different orientation of these inhibitors in the catalytic site. The most active inhibitors of both series inhibited recombinant human PTP1B with phosphotyrosyl dodecapeptide TRDI(P)YETD(P)Y(P)YRK as the source of the substrate with IC50 values in the range of 20-50 nM. Compound I was one of the most active compds. in vivo, normalizing plasma glucose levels at the 25 mg/kg dose (po) and the 1 mg/kg dose (i.p.). Compound I was also selective against several other PTPases.

IT 250341-99-2P

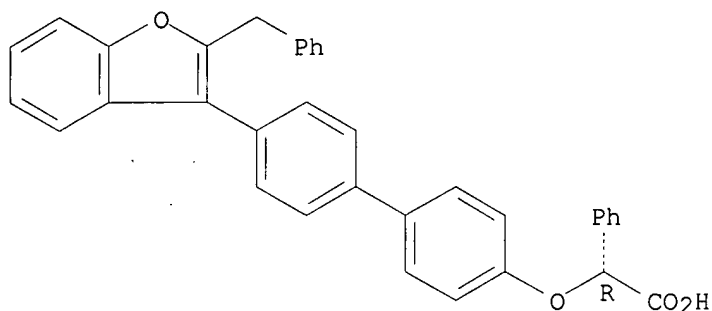
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis of benzofuran and benzothiophene biphenyls as inhibitors of protein tyrosine phosphatase 1B with antihyperglycemic properties)

RN 250341-99-2 CAPLUS

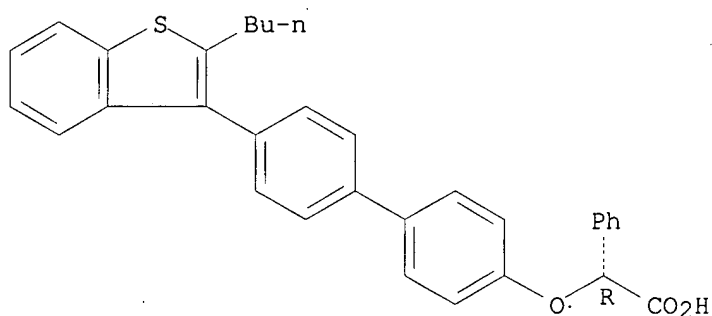
CN Benzeneacetic acid,  $\alpha$ -[[4'-(2-(phenylmethyl)-3-benzofuranyl)[1,1'-biphenyl]-4-yl]oxy]-, ( $\alpha$ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 263759-84-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (synthesis of benzofuran and benzothiophene biphenyls as inhibitors of protein tyrosine phosphatase 1B with antihyperglycemic properties)  
 RN 263759-84-8 CAPLUS  
 CN Benzeneacetic acid,  $\alpha$ -[[4'-(2-butylbenzo[b]thien-3-yl)[1,1'-biphenyl]-4-yl]oxy]-, ( $\alpha$ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



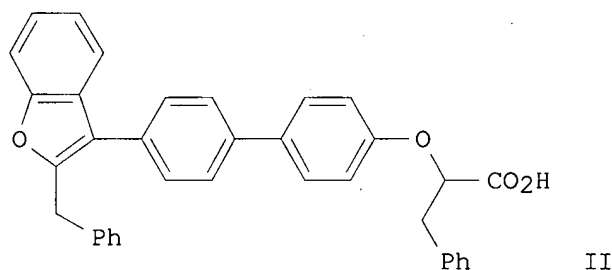
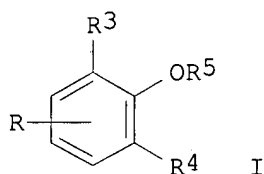
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1999:736685 CAPLUS  
 DOCUMENT NUMBER: 131:351222  
 TITLE: Preparation of  $\alpha$ -(biphenylyloxo)alkanoic acids for treatment of insulin resistance and hyperglycemia  
 INVENTOR(S): Malamas, Michael Sotirios; McDevitt, Robert Emmett; Adebayo, Folake Oluwemimo  
 PATENT ASSIGNEE(S): American Home Products Corporation, USA  
 SOURCE: PCT Int. Appl., 79 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9958518	A2	19991118	WO 1999-US10201	19990510 <--
WO 9958518	A3	20000120		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,

RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 CA 2330557 A1 19991118 CA 1999-2330557 19990510 <--  
 AU 9941836 A 19991129 AU 1999-41836 19990510 <--  
 EP 1077967 A2 20010228 EP 1999-925583 19990510 <--  
 EP 1077967 B1 20021204  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,  
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 JP 2002514635 T 20020521 JP 2000-548322 19990510 <--  
 AT 229015 T 20021215 AT 1999-925583 19990510 <--  
 PRIORITY APPLN. INFO.: US 1998-76205 A 19980512  
 WO 1999-US10201 W 19990510  
 OTHER SOURCE(S): MARPAT 131:351222  
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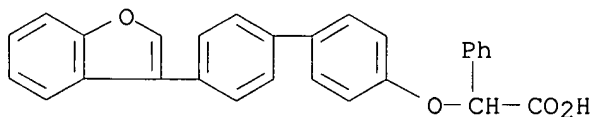


AB Title compds. [I; R = 4-(R1Z1Z2)C6H4; R1 = (ar)alkyl, alkoxy, (hetero)aryl, etc.; Z1 = bond, CH2, CO, CH(OH); Z2 = (benz)imidazolylylene, (benzo)furylylene, thienylene, etc.; R3, R4 = H, halo, alkyl, alkoxy, etc.; R5 = H, alkyl, CH2CO2H, CHR8CH2CO2H, etc.; R8 = H, (ar)alkyl, aryl, etc.] were prepared as protein-tyrosine phosphatase inhibitors. Thus, 4-BrC6H4COCH2Br was etherified by PhOH and the cyclized product condensed with 4-(MeO)C6H4B(OH)2 to give, after O-demethylation, 3-(4'-hydroxybiphenyl)benzofuran which was acylated by BzNMeOMe and the reduced product etherified by (R)-PhCH2CH(OH)CO2Me to give, after saponification, title compd (S)-II. Data for biol. activity of I were given.

IT 250341-86-7P 250341-99-2P 250342-02-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of  $\alpha$ -(biphenyloxy)alkanoic acids for treatment of insulin resistance and hyperglycemia)

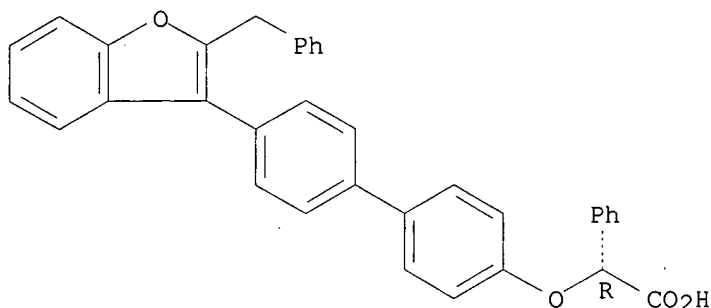
RN 250341-86-7 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[4'-(3-benzofuranyl)[1,1'-biphenyl]-4-yl]oxy]-(9CI). (CA INDEX NAME)

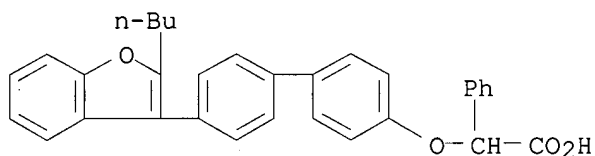


RN 250341-99-2 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[4'-[2-(phenylmethyl)-3-benzofuranyl][1,1'-biphenyl]-4-yl]oxy]-, ( $\alpha$ R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 250342-02-0 CAPLUS  
CN Benzeneacetic acid,  $\alpha$ -[[4'-(2-butyl-3-benzofuranyl)[1,1'-biphenyl]-4-yl]oxy]- (9CI) (CA INDEX NAME)



L5 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:496755 CAPLUS  
DOCUMENT NUMBER: 83:96755  
TITLE: Hydratropic acid derivatives  
INVENTOR(S): Schacht, Erich; Mehrhof, Werner; Simane, Zdenek;  
Nowak, Herbert; Kayser, Detlev  
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Fed. Rep. Ger.  
SOURCE: Ger. Offen., 29 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2358789	A1	19750605	DE 1973-2358789	19731126 <--
ZA 7405890	A	19750924	ZA 1974-5890	19740917 <--
CA 1059516	A1	19790731	CA 1974-213692	19741114 <--
AU 7475405	A	19760520	AU 1974-75405	19741115 <--
CS 176295	B2	19770630	CS 1974-8625	19741120 <--
BE 822496	A1	19750522	BE 1974-150763	19741122 <--
SE 7414704	A	19750527	SE 1974-14704	19741122 <--
FR 2252093	A1	19750620	FR 1974-38453	19741122 <--
FR 2252093	B1	19780908		
JP 50083345	A	19750705	JP 1974-136099	19741125 <--
DK 7406131	A	19750728	DK 1974-6131	19741125 <--
GB 1435050	A	19760512	GB 1974-50946	19741125 <--
US 4072754	A	19780207	US 1974-527089	19741125 <--
CH 605589	A5	19780929	CH 1974-15633	19741125 <--
CH 605590	A5	19780929	CH 1977-14185	19741125 <--

AT 351538	B	19790725	AT 1974-9432	19741125 <--
AT 7409432	A	19790115		
NL 7415414	A	19750528	NL 1974-15414	19741126 <--
HU 168666	B	19760628	HU 1974-ME1801	19741126 <--
DD 114399	A5	19750812	DD 1975-182563	19751125 <--
CS 176290	B2	19770630	CS 1976-7936	19761120 <--
CS 176294	B2	19770630	CS 1976-8624	19761120 <--
AT 7705438	A	19790615	AT 1977-5438	19770726 <--
AT 354449	B	19790110		
AT 7705439	A	19790615	AT 1977-5439	19770726 <--
AT 354450	B	19790110		
CH 617172	A5	19800514	CH 1977-14186	19771121 <--
PRIORITY APPLN. INFO.:			DE 1973-2358789	A 19731126
			AT 1974-9432	A 19741125
			CH 1974-15633	19741125

OTHER SOURCE(S): MARPAT 83:96755

AB 4-RC6H4OCMePhCO2H (I; R = e.g., H, Cl, Ph, 4-ClC6H4O, 1-pyrrolyl, 1,2,3,4-tetrahydro-4-quinolyl) were prepared by the reaction of 4-RC6H4OH with PhCMeBrCO2Et and Na in MeOH, followed by saponification Salts and esters of

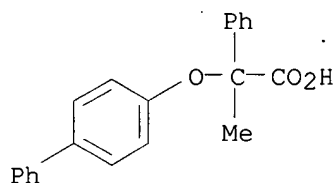
I were also prepared I were useful as cholesterol- and triglyceride-lowering agents; ED data were given.

IT 56855-38-0P 56855-39-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

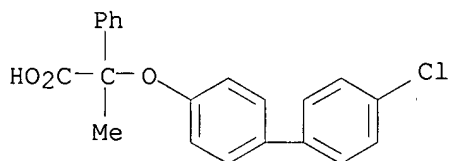
RN 56855-38-0 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -([1,1'-biphenyl]-4-yloxy)- $\alpha$ -methyl- (9CI) (CA INDEX NAME)



RN 56855-39-1 CAPLUS

CN Benzeneacetic acid,  $\alpha$ -(4'-chloro[1,1'-biphenyl]-4-yloxy)- $\alpha$ -methyl- (9CI) (CA INDEX NAME)



L5 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1973:536854 CAPLUS

DOCUMENT NUMBER: 79:136854

TITLE: Amides and esters of phenoxyphenylacetic acids

INVENTOR(S): Bolhofer, William A.

PATENT ASSIGNEE(S): Merck and Co., Inc.

SOURCE: Ger. Offen., 33 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2307038	A1	19730906	DE 1973-2307038	19730213 <--
NL 7301246	A	19730816	NL 1973-1246	19730129 <--
CH 587794	A5	19770513	CH 1973-1901	19730209 <--
JP 48086842	A	19731115	JP 1973-16667	19730212 <--
GB 1388776	A	19750326	GB 1973-6789	19730212 <--
FR 2181725	A1	19731207	FR 1973-4988	19730213 <--

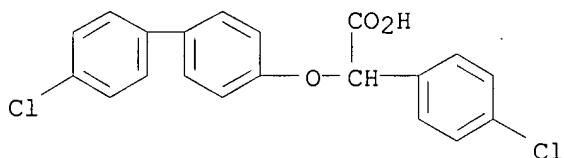
PRIORITY APPLN. INFO.: US 1972-226293 A 19720214

AB Seven RC6H4OCH(COR1)C6H4R2-4 [I; R = 3-allyl, 3-CF3, 4-PrCO, 4-PhNH, 4-ClC6H4, 4-(1,2,3,4-tetrahydro-1-naphthyl); R1 = OCH2CH2NHAc, OCH2CH2NHBr, NHCH2CO2H, NHCH2CH2Cl, OCH2Ph; R2 = Cl, OMe] and salts with cyclohexylamine or citric acid, useful as anticholesteremics, blood fat lowering drugs, and in the treatment of atherosclerosis, were prepared mainly by treatment of I (R1 = OH) with SOCl2 to give I (R1 = Cl) and reaction with alcs. and amines. Thus, I (R = 4-PrCO, R1 = OH, R2 = Cl) and SOCl2 were refluxed in CHCl3 to give the chloride, which reacted with HOCH2CH2NHAc in DMF and Et2O in the presence of pyridine at from 5° to room temperature to give I (R = 4-PrCO, R1 = OCH2CH2NHAc, R2 = Cl).

IT 50819-85-7  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(amidation and esterification of)

RN 50819-85-7 CAPLUS

CN Benzeneacetic acid, 4-chloro- $\alpha$ -[(4'-chloro[1,1'-biphenyl]-4-yl)oxy]-(9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1966:93101 CAPLUS

DOCUMENT NUMBER: 64:93101

ORIGINAL REFERENCE NO.: 64:17471e-f

TITLE: Influence of molecular structure on optical properties of systems with carbon asymmetry centers. V. On synthesis of optically active  $\alpha$ -(4-biphenyloxy)phenylacetic acids

AUTHOR(S): Janczewski, Marian; Bilczuk, Luba

CORPORATE SOURCE: Sklodowska Curie Univ., Lublin, Pol.

SOURCE: Roczniki Chemii (1965), 39(12), 1927-9  
CODEN: ROCHAC; ISSN: 0035-7677

DOCUMENT TYPE: Journal

LANGUAGE: French

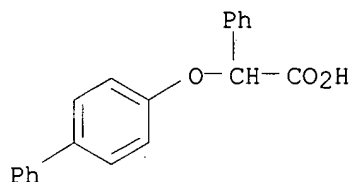
AB cf. CA 60, 14416c. 4-Hydroxybiphenyl heated with the Me ether of  $\alpha$ -bromophenylacetic acid (I) and MeONa in anhydrous MeOH medium gave Me  $\alpha$ -(4-diphenyloxy)phenylacetate, m. 119-20° (MeOH). I treated with MeOH + H2O solution of KOH gave racemic  $\alpha$ -(4-diphenyloxy)phenylacetic acid (II), m. 181-2° amide m. 208-9°; p-nitrobenzyl ether m. 145-6°, p-bromo-phenacyl ether m. 121-2°. II was separated by fractional crystallization of neutral salts of cinchonidine into optical antipodes, m. 195-6° with  $[\alpha]_{20D}$  -106.06, and m. 194-5° with  $[\alpha]_{20D}$  106.06. Similarly, racemic  $\alpha$ -(4-diphenyloxy)propionic acid was obtained, m. 165-6°. cf. CA 62, 16159g.

IT 106336-82-7P, Acetic acid, (4-biphenyloxy)phenyl-, compound with cinchonidine (1:1)  
RL: PREP (Preparation)

(preparation of)  
RN 106336-82-7 CAPLUS  
CN Acetic acid, (4-biphenyloxy)phenyl-, compd. with cinchonidine (7CI) (CA  
INDEX NAME)

CM 1

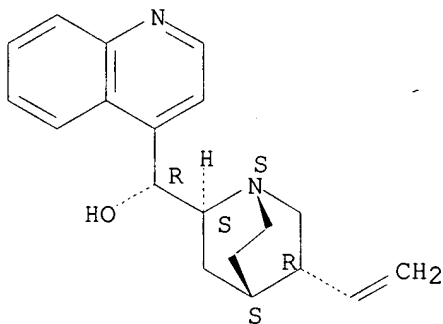
CRN 94465-08-4  
CMF C20 H16 O3



CM 2

CRN 485-71-2  
CMF C19 H22 N2 O

Absolute stereochemistry. Rotation (-).



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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
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USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE  
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

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LAST RELOADED: Feb 16, 2007 (20070216/UP).

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L3           44 S L1 FULL

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L5           8 S L4 AND PY<2003

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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